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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/373,585	08/13/1999	NOBUHIKO OGURA	Q55432	2737

7590

11/27/2001

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2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER

LU, FRANK WEI MIN

ART UNIT	PAPER NUMBER
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1655

DATE MAILED: 11/27/2001

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Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory ActionApplication No.
09/373,585Applicant(s)
OguraExaminer
Frank LuArt Unit
1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED Oct 25, 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ In view of the early submission of the proposed reply (within two months as set forth in MPEP § 706.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for the reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on Oct 25, 2001. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.
3. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search. (See NOTE below);
- (b) ☐ they raise the issue of new matter. (See NOTE below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: _____

4. ☐ Applicant's reply has overcome the following rejection(s): _____

5. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment cancelling the non-allowable claim(s).

6. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____

7. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

8. ☒ For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 6, 7, and 14-21

9. ☐ The proposed drawing correction filed on _____ a) ☐ has b) ☐ has not been approved by the Examiner.

10. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

11. ☐ Other: _____

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ADVISORY ACTION

1. The purposed amendments filed on October 25, 2001 have been fully considered and have been entered. However, the arguments in applicant's remarks are not persuasive toward the withdrawal of the rejection. The claims pending in this application are claims 6, 7, and 14-21.

Response to Arguments

- I. In pages 4, second paragraph of applicant's remarks, applicant argued that "Yamamoto is drawn from non-analogous art" since "Yamamoto relates to the field of manufacturing identification cards whereas the present invention relates to forming a test array of biological substances" and "Yamamoto relates to laminating sheets of rigid base materials with a magnetic strip and cutting the sheets into individual cards".

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. In response to applicant's argument that the reference from Yamamoto is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the examiner noted that the rejection under 25 U.S.C 103 was based on the combination of three references. Heyneker's patent clearly provided a motivation to cut a sheet-like substrate that immobilized a plurality of known specific binding agents into a plurality of strips (see Heyneker, column 6, second paragraph). The sheet-like substrate could be cut using different cutting

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means. Since Yamamoto's patent provided one of different cutting means, this patent could be considered to be an analogous art relative to other references used in the rejection. In fact, this patent was not a central part of the rejection.

II. In page 4, last paragraph bridging to page 5, second paragraph of applicant's remarks, applicant argued that claim 6 would be patentable since the combination of the references did not teach or suggest each feature of claim 6 since Matson *et al.*, did not describe "a conveyor that conveys either the applicator or the substrate relative to each other in a direction which is substantially perpendicular to the direction of the arrangement of applicators" and did not modified "to include the conveying means as described by claim 6"

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. First, Matson *et al.*, did describe "a conveyor that conveys either the applicator or the substrate relative to each other in a direction which is substantially perpendicular to the direction of the arrangement of applicators ". For example, they taught that a parallel one-dimensional matrix or array of biopolymers could be formed at an angle to the previous array by rotating the applicator (considered as applicator here) with respect to the solid support material (see column 2). Positioning means for positioning the applicator (see column 8, claim 1) could be considered as a conveyor as described in claim 6. Second, Matson *et al.*, did not need to modify in order to fit the conveying means as described by claim 6 since they teach the conveying means as described by claim 6 (see above).

III. In page 5, last paragraph bridging to page 6, first paragraph of applicant's remarks, applicant argued that: (1) " it would be unnecessary to provide any cutting of the one-

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dimensional array” since “in Matson, analysis of a one-dimensional array of biopolymers comprised cleaving of the polynucleotide strands from the support material and collecting the strands in containers at the end of respective channels”; and (2) “one skilled in the art would not cut up the formations and substrate in Matson” since “the nature of the polynucleotides in Matson (formed on a derivatized polypropylene, col.4, lines 60-68) suggests a much more volatile formation than that described in Heynecker (covalent bonding to fiber).

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. First, since the substrate taught by Matson *et al.*, could contain 4096 potential hybridization sites (see column 8), one skilled in the art at the time the invention was made would be motivated to “cut up the formations and substrate in Matson” if he or she did not want to examine the hybridization of all 4096 potential hybridization sites during a hybridization assay. Second, “a much more volatile formation” is not the reason for the rejection.

IV. In page 6, second paragraph of applicant’s remarks, applicant argued that “the examiner is using impermissible hindsight reconstruction in maintaining the rejection”.

This argument has been fully considered but it is not persuasive toward the withdrawal of the rejection. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

V. In pages 6-8 of applicant's remarks, applicant argued that claims 14 and 17 were patentable since: (1) "the examiner's rejection is internally inconsistent to the extent that relies on 'inherent disclosure' yet categorizes the scanning in a single dimension as a possible occurrence"; (2) Stern *et al.*, only taught conveying along multiple axes scanning (or conveyance), not conveying along a single axis scanning (or conveyance); (3) "the single axis screen described by claim 14 provides significant benefits over the three-dimensional scan of Stern" and (4) "the examiner has failed to discuss where the difference analysis is suggested" in claim 17.

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. As stated in Paper No. 9, Stern *et al.*, taught a system comprising an exciting light source, a conveyor, a photodetector, and an analysis means. Although Stern *et al.*, did not directly show that the scanning system could causes the exciting light to linearly scan the strip-like test piece along a single axis and determined a difference in fluorescence values between two samples using the apparatus, these limitations could be considered as intended uses of the system taught by Stern *et al.*, (inherent to the reference) because (1) claims 14-20 were directed to products, not methods; (2) since the scanning system taught by Stern *et al.*, could cause the exciting light to linearly scan the strip-like test piece along multiple axes during the scanning process, this system would have a ability to linearly scan the strip-like test piece along a single axis; and (3) the examiner did discuss where the difference analysis since the apparatus

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taught by Stern *et al.*, could be used to detect the interaction between unlabeled substrate and two different fluorescence-labeled targets which included the determination of a difference in fluorescence values between two samples (see Paper No. 9, pages 9 and 10). Note that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

2. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (703) 305-1270. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.


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Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

Frank Lu
November 21, 2001



ETHAN C. WHISENANT
PRIMARY EXAMINER

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